

AMENDMENTS TO THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

1 - 52 (canceled).

53. (Currently Amended) An elongate tubular heat transfer element having a longitudinal tube axis and comprising a wall of monolithic construction having an outer surface and an inner surface which determines a boundary of a hollow interior which extends longitudinally of the tube axis of the heat transfer element, said wall being formed from a composite material comprising a matrix and rovings embedded in the matrix, wherein the composite material is in contact with the hollow interior, and wherein the matrix consists essentially of a fluoropolymer selected from polyvinylidene fluoride and copolymers of at least 80% by weight, based upon the weight of the copolymer, of vinylidene fluoride and up to 20% by weight, based upon the weight of the copolymer, of at least one other fluorine based monomer selected from tetrafluoroethylene, hexafluoropropylene and vinyl fluoride, and wherein the rovings embedded in the matrix comprise boron-free chemically resistant glass fibres, the rovings comprising from about 20% to about 60% by volume based upon the volume of the composite material and including rovings which extend longitudinally in a lengthwise direction parallel to the tube axis of the tubular heat transfer element and rovings which extend spirally around the tube axis.

54. (Previously Presented) An elongate tubular heat transfer element according to claim 53, wherein the fluoropolymer is polyvinylidene fluoride.

55. (Previously Presented) An elongate tubular heat transfer element according to claim 53, further comprising a first layer adjacent the outer surface of the wall, a second layer surrounding the first layer, and at least one other layer intermediate the

first and second layers, wherein the first, second and at least one other layers each include rovings, and wherein the rovings of a particular layer all extend substantially in a common direction which is different from the common direction of any adjacent layer, and wherein the common direction is in each case selected from a direction extending spirally around the tube axis and a direction extending longitudinally in a lengthwise direction parallel to the tube axis.

56. (Currently Amended) An elongate tubular heat transfer element according to claim 53, wherein the wall comprises a first layer adjacent the inner surface, a second layer adjacent the outer surface, and an intermediate layer between said first and second layers, and wherein the rovings in the first layer of the wall adjacent the inner surface and the rovings in ~~a second~~ the second layer of the wall adjacent the outer surface each extend spirally around the tube axis and wherein the rovings in the intermediate layer of the wall between the first and second layers extend longitudinally in a lengthwise direction relative to the tube axis of the tubular heat transfer element.

57. (Previously Presented) An elongate tubular heat transfer element according to claim 56, wherein the rovings in the intermediate layer comprise about 60% of the total rovings and wherein the rovings of the first and second layers together comprise about 40% of the total of all rovings in the heat transfer element.

58. (Currently Amended) An elongate tubular heat transfer element having a longitudinal tube axis and comprising a wall of monolithic construction having an outer surface and an inner surface which determines a boundary of a hollow interior which extends longitudinally of the tube axis of the heat transfer element, said wall being formed from a composite material comprising a matrix and rovings embedded in the matrix, wherein the composite material is in contact with the hollow interior, and wherein the matrix consists essentially of polyvinylidene fluoride having embedded therein rovings of boron-free chemically resistant glass fibres, the rovings comprising from

about 20% to about 60% by volume based upon the volume of the composite material and including rovings which extend longitudinally in a lengthwise direction parallel to the tube axis of the heat transfer element and rovings which extend spirally around the tube axis.

59. (Previously Presented) An elongate tubular heat transfer element according to claim 58, further comprising a first layer adjacent the outer surface of the wall, a second layer surrounding the first layer, and at least one other layer intermediate the first and second layers, wherein the first, second and at least one other layers each include rovings, and wherein the rovings of a particular layer all extend substantially in a common direction which is different from the common direction of any adjacent layer, and wherein the common direction is in each case selected from a direction extending spirally around the tube axis and a direction extending longitudinally in a lengthwise direction parallel to the tube axis.

60. (Previously Presented) An elongate tubular heat transfer element according to claim 58, wherein the wall comprises a first layer adjacent the inner surface, a second layer adjacent the outer surface, and an intermediate layer between said first and second layers, and wherein the rovings in the first layer of the wall adjacent the inner surface and the rovings in the second layer of the wall adjacent the outer surface each extend spirally around the tube axis and wherein the rovings in the intermediate layer of the wall between the first and second layers extend longitudinally in a lengthwise direction relative to the tube axis of the tubular heat transfer element.

61. (Previously Presented) An elongate tubular heat transfer element according to claim 60, wherein the rovings in the intermediate layer comprise about 60% of the total rovings and wherein the rovings of the first and second layers together comprise about 40% of the total of all rovings in the heat transfer element.

62 – 63 (Canceled). |

64. (Previously Presented) An elongate tubular heat transfer element according to Claim 53, wherein the composite material further comprises a particulate metal.

65. (Previously Presented) An elongate tubular heat transfer element according to Claim 58, wherein the composite material further comprises a particulate metal.

66. (New) An elongate tubular heat transfer element according to Claim 53, wherein the composite material further comprises a particulate thermally conductive material.

67. (New) An elongate tubular heat transfer element according to Claim 58, wherein the composite material further comprises a particulate thermally conductive material.